

Product Information

Anti-TrkA

Developed in Rabbit,
Affinity Isolated Antibody

Product Number **T9566**

Product Description

Anti-TrkA is developed in rabbit, using a synthetic peptide corresponding to residues at the C-terminus of human TrkA as immunogen, conjugated to KLH. The antibody is affinity-purified using protein A and peptide affinity chromatography.

Anti-TrkA detects total TrkA levels, independent of its phosphorylation state. The antibody may be used in immunoblotting, immunocytochemistry, and ELISA. It reacts with human, mouse, and rat TrkA.

TrkA, apparent molecular weight 140 kDa, is a high affinity nerve growth factor (NGF). The Trk proto-oncogene family contains four members, TrkA, TrkB, TrkC, and TrkE, which are variably expressed throughout the central and peripheral nervous systems. TrkA binds to nerve growth factor (NGF) and autophosphorylates on tyrosine residues (Tyr490, Tyr674, Tyr675, Tyr751 and Tyr785) to activate multiple downstream effector proteins. Phosphorylation at Tyr490 is required for Shc association and subsequent activation of the Ras-MAP kinase-signaling cascade, which leads to activation of Elk-1-dependent gene transcription and neurite growth. Phosphorylations at Tyr674 and Tyr675 lie within the catalytic domain of TrkA tyrosine kinase and reflect Trk kinase activity. Additionally, phosphorylation at Tyr751 is required for PI3-kinase association and activation of the Akt signaling cascade.

Reagents

Anti-TrkA is supplied as a solution in 10 mM sodium HEPES, pH 7.5, containing 150 mM sodium chloride, 100 µg/ml bovine serum albumin (BSA), and 50% glycerol.

Storage/Stability

Store at -20 °C. Repeated freezing and thawing is not recommended. Storage in frost-free freezers is also not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Recommended working dilution is 1:1,000 for immunoblotting (chemiluminescent). Incubate membrane with diluted antibody in 5% BSA, 1X Tris buffered saline, and 0.1% Tween-20 at 2-8 °C with gentle shaking, overnight.

Recommended working dilution is 1:100 for immunocytochemistry using PC12 cells.

Note: In order to obtain the best results in different techniques and preparations we recommend determining the optimal working dilution by titration.

References

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